

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/21058

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H04J 3/14 US CL : 370/401 According to International Patent Classification (IPC) or to both national classification and IPC																										
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 370/401,410; 709/220,221,222 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST: header, file, download, configure																										
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X ---</td> <td>US 5,991,774 A (TATE et al) 23 November 1999, column 1, line 14-column 2, line 33 and column 8, lines 10-13.</td> <td>1-3, 6, 7, 10, 11, 14, and 16-18</td> </tr> <tr> <td>Y</td> <td></td> <td>4, 5, 8, 9, 12, 13, 15, and 19</td> </tr> <tr> <td>Y</td> <td>US 5,845,128 A (NOBLE et al) 01 December 1998, column 1, line 58-column 2, line 14.</td> <td>4, 15, and 19</td> </tr> <tr> <td>Y</td> <td>US 6,009,547 A (JAQUETTE et al) 28 December 1999, column 2, lines 21-36.</td> <td>5, 15, and 19</td> </tr> <tr> <td>Y</td> <td>US 5,599,231 A (HIBINO et al) 04 February 1997, column 5, lines 22-43.</td> <td>8, 15, and 19</td> </tr> <tr> <td>Y</td> <td>US 6,105,149 A (BONISSONE et al) 15 August 2000, column 4, lines 1-4.</td> <td>9, 15, and 19</td> </tr> <tr> <td>Y</td> <td>US 6,029,196 A (LENZ) 22 February 2000, column 1, line 51-column 2, line 27.</td> <td>12 and 13</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X ---	US 5,991,774 A (TATE et al) 23 November 1999, column 1, line 14-column 2, line 33 and column 8, lines 10-13.	1-3, 6, 7, 10, 11, 14, and 16-18	Y		4, 5, 8, 9, 12, 13, 15, and 19	Y	US 5,845,128 A (NOBLE et al) 01 December 1998, column 1, line 58-column 2, line 14.	4, 15, and 19	Y	US 6,009,547 A (JAQUETTE et al) 28 December 1999, column 2, lines 21-36.	5, 15, and 19	Y	US 5,599,231 A (HIBINO et al) 04 February 1997, column 5, lines 22-43.	8, 15, and 19	Y	US 6,105,149 A (BONISSONE et al) 15 August 2000, column 4, lines 1-4.	9, 15, and 19	Y	US 6,029,196 A (LENZ) 22 February 2000, column 1, line 51-column 2, line 27.	12 and 13
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																								
X ---	US 5,991,774 A (TATE et al) 23 November 1999, column 1, line 14-column 2, line 33 and column 8, lines 10-13.	1-3, 6, 7, 10, 11, 14, and 16-18																								
Y		4, 5, 8, 9, 12, 13, 15, and 19																								
Y	US 5,845,128 A (NOBLE et al) 01 December 1998, column 1, line 58-column 2, line 14.	4, 15, and 19																								
Y	US 6,009,547 A (JAQUETTE et al) 28 December 1999, column 2, lines 21-36.	5, 15, and 19																								
Y	US 5,599,231 A (HIBINO et al) 04 February 1997, column 5, lines 22-43.	8, 15, and 19																								
Y	US 6,105,149 A (BONISSONE et al) 15 August 2000, column 4, lines 1-4.	9, 15, and 19																								
Y	US 6,029,196 A (LENZ) 22 February 2000, column 1, line 51-column 2, line 27.	12 and 13																								
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																										
<table border="1"> <thead> <tr> <th colspan="2">* Special categories of cited documents:</th> </tr> </thead> <tbody> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </tbody> </table>			* Special categories of cited documents:		"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed													
* Special categories of cited documents:																										
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention																									
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone																									
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art																									
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family																									
"P" document published prior to the international filing date but later than the priority date claimed																										
Date of the actual completion of the international search 07 November 2003 (07.11.2003)		Date of mailing of the international search report 12 JAN 2004																								
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer Huy Vu Telephone No. (703)305-3900																								